

Mailed [redacted] 29 Aug
Recd DED 9 Sept. STAT

August 27, 1968

SUBJ: Contract [redacted] STAT

Sent [redacted] 700' of 2420 on 1 Oct 68

Gentlemen: STAT

This proposed program outlines the necessary redesign, fabrication, assembly and testing to provide a [redacted] Processor acceptable to the sponsor. These modifications will enable us to adequately process film [redacted] serographic duplicating film and film [redacted] fine grain aerial duplicating film. STAT
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I. Replenishing System

The replenishing system will consist of 4 flow meters sufficient in size to process the above mentioned film types. Each processing module will be modified by the addition of overflow stand pipes.

II. Temperature Control and Indicating System

The temperature indicating system will be tested for accuracy and reliability. If the present system proves unusable, it will be replaced with a thermister-operated system.

Our intention will be to elevate the processing temperature well above ambient, creating enough temperature difference as to eliminate the need for a refrigeration system in the processor.

III. Positive Pressure

The bubbling problem causing the processing solutions to overflow onto the pumps may be eliminated by increasing the amount of anti-foam agent used in these solutions. If this simple test proves negative, it will become necessary to increase the exhaust duct size, to reduce the positive pressure build-up under each module cover.) necessary

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IV. Film Transport Indicating System

The film transport indicating system will consist of an independent tachometer and an FPM indicating meter mounted adjacent to the speed control knob on the front panel. ✓

V. Drain Problem

The drain outlet size will be increased to accommodate draining all modules at one time. ✓

VI. Dryer

There are two possible design approaches to the drying problem which shall be studied.

A - The simplest modification appears to be the addition of a second infra red source which will be installed so that the radiation is applied to the emulsion as well as the base side of the film. *Doesn't work.*

B - In the event the infra dryer proves unsatisfactory a conventional type dryer will be used. ✓

VII. Acceptance Test Criteria

A - Reference Film Samples

Film samples will be sensitometrically exposed and processed under controlled conditions in accordance with the film manufacturer's recommendations. The resultant D log E curves for each film type will be used as a basis to evaluate the performance of the processor.

B - Processing Parameters

Sufficient film will be exposed under the same conditions as the reference film samples and processed to the proper Time - Temperature and Type of chemistry to produce D log E curves that approach those obtained with the reference film samples. The gamma will be equivalent to the reference. Photographic speed will be within 1 stop. Uniformity of development will show a density variation of no more than ± 0.05 density units at an average density of 1.00 on a 9 1/2" X 9 1/2" film sample.

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STAT The parties recognize that the performance requirements in this redesign plan are within the original scope of the contract. The successful demonstration of film processing capability shall constitute acceptance of the Processor. This program may be completed within six months from your acceptance of this proposal.

STAT Sincerely yours,